

REMARKS/ARGUMENTS

This is in response to the official action of June 26, 2007. Claim 1 has been amended, in its preamble, to refer to the invention as a control apparatus, consistent with the title of the invention; the actuator is one of the elements of the control apparatus. Claim 1 also has been amended to include reference to the longitudinal orientation of the channel, the claimed inclined surface of the channel and the direction of movement of the shaft under the influence of the actuator. Claim 1 also has been broadened by removing reference to the actuator being pivoted to the housing. Claim 11 has been similarly amended. The remaining amendments to claims 1 and 11 are not considered to affect the scope of the claim and have been made solely to improve the syntax.

Reconsideration is requested of the rejection of claims 1-8 and 10-13 as anticipated under 35 U.S.C. 102(b) by EP 1 258 391 (Kaupp et al.). The Kaupp reference, which is in the German language and for which there was no English translation or summary provided, has nothing to do with the subject matter of applicant's invention and does not disclose the invention, as discussed in further detail below.

APPLICANT'S INVENTION

Applicant's invention relates to a device for controlling the movement of an elongate medical shaft of a catheter or catheter-like device that is placed intraluminally in a patient's blood vessel or other vessel. Such devices include, for example, angioplasty catheters, stent deployment catheters, atherectomy and thrombectomy catheters, as well as distal protection devices, such as filters and occluders. Many of these devices, including filters and occluders use a "push-pull mechanism" to operate the elements at the distal end of the device. Such devices often include an outer tube and a core wire movable longitudinally through the tube. These devices have relatively small dimensions, for example, core wires having a diameter of about 0.013 inch or less and hypotubes having a diameter of the order of about 0.014 inch. Such devices may be easily crimped or kinked as the wire and sheath are moved relative to each other. The invention relates to a device by which the longitudinal movement of such elements can be controlled precisely during such intraluminal procedures. One embodiment of the invention is illustrated in FIGS. 3-5, reproduced below, in which FIG. 3 is an end view, FIG. 4 is a section view along the lines A-A of FIG. 3 and FIG. 5, is a plan view.

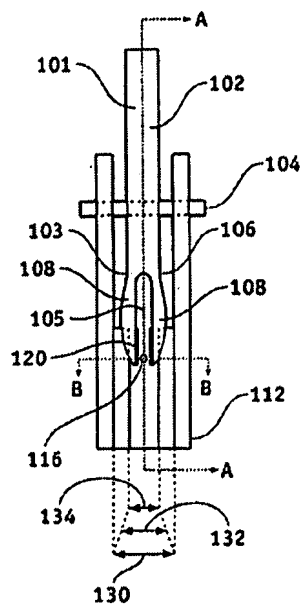


FIG. 3

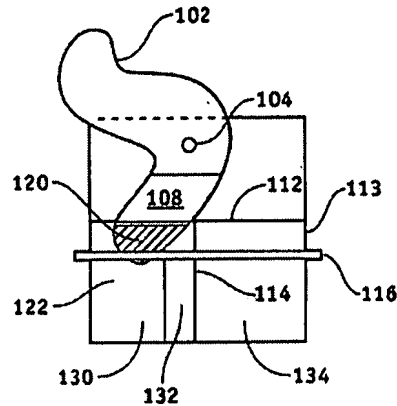


FIG. 4

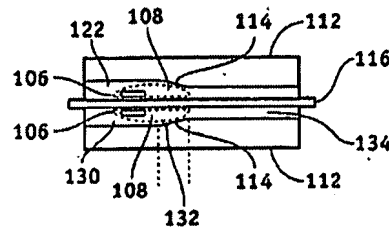


FIG. 5

The embodiment includes a housing 112 with a channel 122 through which the medical shaft 116 to be controlled can pass. An actuating lever 102 is pivotally mounted at 104 to the upper portion of the housing 112 so that the lower portion of the actuating lever 102, which is formed to define a pair of spaced, flexible jaws 108, extends into the channel 122. The jaws 108 define a space 105 through which the shaft 116 can pass. As the actuating lever 102 is pivoted, the outwardly facing surface of its jaws engage the inclined surfaces 132 on the channel that urge the jaws together sufficiently to grip the shaft or wire 116.

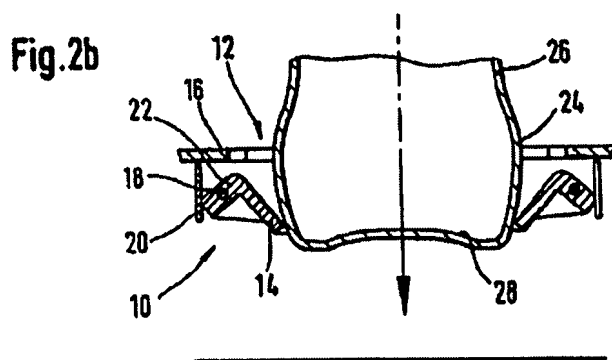
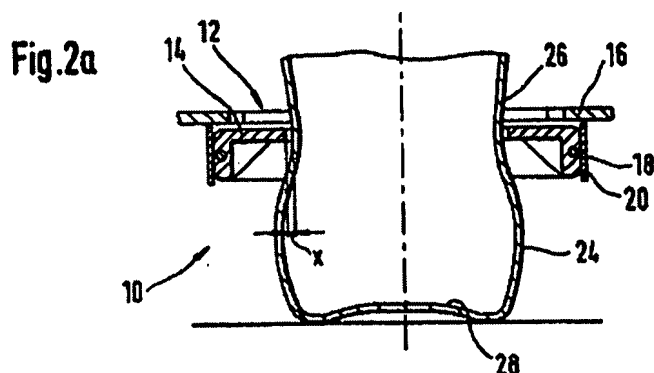
The channel may be considered as having three sections including a release region 130 in which the jaws are spaced widely, a transition region 132 in which the surfaces defining the channel are inclined to wedge the jaws toward each other to grip the shaft or wire and a third,

engagement region 134 in which the jaws maintain their firm grip on the shaft while permitting movement of the actuator to advance or retract the shaft in a longitudinal direction.

CITED PRIOR ART

European Patent Publication EP 1 258 391 (Kaupp)

As applicant understands it, Kaupp relates to a beverage container holder 10 for holding a shaped bottle 24 securely against tilting in the holder 10. It is adapted particularly for installation in a motor vehicle. It is further adapted especially to provide a holder for a beverage container that has a reduced diameter or a waist above its base. The container can be held reliably against tilting and can be removed from the beverage container holder without difficulty. The holder includes L-shaped flaps 14 arranged in the region of an edge 16 of an insertion opening 12. The flaps 14 are pivoted on pins 18. The beverage container holder 10 also includes a curved leaf spring 20 that biases against outer surfaces 22 of one of the legs of each of the L-shaped flaps to urge the flaps 14 resiliently into the position of FIG. 1A. When the bottle is inserted into the holder 10, it is pressed against the other legs of the flaps 14 to allow the larger diameter of the bottle to pass through the insertion opening 12. When the bottle is seated on the base of the device, the flaps 14 are returned by the spring 20 to their horizontally projecting configuration to closely embrace the waist portion of the bottle. As shown in FIG. 2a, when the bottle is in place in the holder 10, the flaps 14 do not directly engage the bottle but, instead, are provided with a slight spacing X between the waist of the bottle 24 and the flaps 14. There is no shaft. There is no actuator with jaws to grip a shaft and to move a shaft.



CLAIM REJECTIONS – 35 U.S.C. §102

Reconsideration is requested of the rejection of claims 1-8 and 10-13 as anticipated under 35 U.S.C. §102(b) by Kaupp EP 1 258 391.

Not only does Kaupp fail to disclose the same invention, it fails to disclose a shaft or an actuator for moving a shaft. Instead, what is asserted in the action to be a “shaft 24” is, in fact, a bottle and, particularly, a bottle having a narrowed waist section 26. The reference numeral 10 in Kaupp is not a “housing” as asserted in the action but is, instead, merely the general numerically identifier for the beverage container holder. There is no channel, as asserted in the action, with “...multiple inclined opposing surfaces 20,...”. Element 20 in Kaupp is a circular leaf spring. Moreover, the leaf spring 20 does not engage the bottle 24. The asserted “pivotal actuator assembly having first and second spaced apart jaws 22” also is misplaced. The reference numeral 22 refers merely to the outer surfaces of the flaps. Surfaces 22 are not jaws and do not grip anything. Indeed, in the intended mode of operation, when the bottle is seated in the holder 10, a space X exists between elements 14 and the surface of the bottle. The rejection,

based on a German language reference, without benefit of an authoritative English language translation or summary, appears to be an effort to meet the language of applicant's claims by simply referring to drawings independently of the disclosure as to what those drawings depict and mean.

Of course, anticipation under 35 U.S.C. §102 requires that each and every limitation of the claim is disclosed in a single prior art reference, either expressly or inherently. The anticipating reference must disclose the elements in the arrangement called for by the claim. If any limitation of the claim is missing, the reference does not anticipate. Here, Kaupp fails to disclose most of the limitations of applicant's claimed invention. In particular, Kaupp does not disclose:

- an actuator for moving an intraluminal shaft;
- a housing with a channel that has at least a first substantially inclined surface;
- an actuator assembly for urging at least one of first and second jaws against the inclined surface to cause the dimensions between the spaced apart jaws to change.

Each of claims 2-8 depends directly or indirectly from claim 1 and is not anticipated by Kaupp for the same reasons. Additionally claim 3 includes the further limitation that the first dimension corresponds to a release dimension and the second to a gripping dimension between the jaws. As discussed above, Kaupp discloses no such arrangement.

Claim 4 depends from claim 1 and further defines that the channel comprises a release region, a first gripping region and a first transition region that includes the first substantially inclined surface. Here, again, this is not disclosed in Kaupp.

Claim 8 depends from claim 4 and adds the further limitation that the transition region includes a second substantially inclined surface for engaging the spaced apart jaws respectively to reduce the first dimension. Kaupp fails to disclose this feature of applicant's invention.

As to claim 11, it includes the same limitations discussed above in connection with claim 1 relating to the housing with the channel having an inclined surface and an actuator assembly having spaced apart jaws extending into the channel to receive a shaft. Additionally, claim 11 includes limitations to the configuration of the channel to include a release region, a first engagement region and a first transition region between the release and engagement regions. Kaupp, of course, does not disclose any of these elements of the invention.

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Claims 12 and 13 include all of the limitations of claim 11 that are not anticipated by Kaupp for the same reasons. Additionally, these claims include further limitations to a second substantially opposed inclined surface.

Claim 1 is generic to withdrawn claims 9, 14, 15 and 18-22. Examination and allowance of those claims is requested.

If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at telephone (978) 739-3075 (Eastern Time).

Respectfully submitted,

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